

October 4, 2004, 12:00 p.m.

New Steam Emission at Mount St. Helens; Significant Eruption Still Imminent

VANCOUVER, Wash. – Mount St. Helens experienced a steam emission at approximately 9:47 this morning, sending a primarily steam plume 1-2,000 feet above the rim of the crater. The mountain also emitted a small steam plume overnight, and scientists continue to warn of an imminent risk of a more significant eruption.

Scientists believe that hot material rose up in the mountain and came into contact with glacier water, causing boiling and creating steam. The plume produced by this morning's event seems to be mostly steam with little, if any, ash. The plume is not scattering significantly, but the wind is blowing toward the southeast. The current event was not preceded by changed seismic activity or compression waves. Seismicity is continuing as it was before the event.

The magma moving up may create a dome, or it may cause a more explosive event. Scientists are watching closely to determine what will happen next.

These events are breaking up the plug that is blocking the magma. As the smaller eruptions occur, the plug gets weaker, increasing the chance of a larger eruption. This is consistent what has been expected by scientists.

Last night, earthquake activity increased until a steam (and possibly ash) event occurred about 10:40 p.m. Observers at Coldwater Ridge could see the steam plume, which barely made it to the crater rim, in the moonlight.

United States Geological Survey (USGS) scientists believe Mount St. Helens could experience additional steam and ash eruptions at any time, and these eruptions may be larger and more ash-rich than previously thought. The Volcano Alert remains at Alert Level 3, meaning a volcanic eruption appears imminent.

Results from GPS measurements indicate no significant deformation of the outer flanks of the volcano. However, visual observations and photographic analysis show large-scale uplift (10's of meters) of part of the glacier and a nearby segment of the lava dome. A field crew installed a new GPS instrument on the dome yesterday.

Two telemetered microphones are now in operation to detect explosions. USGS will receive a remotely operated video camera from the Hawaiian Volcano Observatory today that will be installed on the crater rim. Field crews will also work at installing additional seismometers on the flanks of the volcano today and will continue to harden the GPS sites and download data. Time permitting, additional flights to acquire thermal imagery and gas measurements will occur.

Road and trail closures are still in effect to protect public safety, and represent the areas that officials believe are at risk.

The Forest Service closed the Ape Cave late Sunday after visitors discovered that a rock dislodged from the lava tube's roof. Ape Cave is near the town

of Cougar south of the mountain. Also closed was the Mt. Margaret back country located north of Spirit Lake and east of Coldwater Lake.

Current road closures include State Route 504 starting at milepost 43 (Coldwater Lake-Hummocks Trail). This section of SR 504 will remain closed until the U.S. Forest Service indicates it is safe to reopen. The Johnston Ridge Observatory also remains closed.

Air traffic is prohibited within a five-mile radius of the volcano, except for authorized officials and accredited news media if they file appropriate flight plans.

This information is provided by the Unified Command of the Emergency Coordination Center for Mount St. Helens based on information from the United States Geological Survey, the United States Forest Service, and the state and counties. The Unified Command will continue to monitor all information and coordinate among federal, state and local agencies to protect public safety.

The next media briefing will take place at 2:30 p.m. Monday in the Joint Information Center (JIC) at the U.S. Forest Service Gifford Pinchot National Forest Headquarters. A conference bridge is available for the briefing. Media should call 210-234-9881 and enter pin number 96721#.

The Cascades Volcanic Observatory is open to media for PHOTOGRAPHY AND VIDEO ONLY of the seismographs and other instruments between 4:30 p.m. and 7 p.m. No interviews will be allowed so scientists can focus on their duties. The Observatory is located at 1300 S.E. Cardinal Court, near 164th Avenue and Tech Center Drive.

The JIC will be staffed from 7 a.m. to 9 p.m. at this time.

The address of the Pinchot Headquarters is 10600 NE 51st Circle, Vancouver, Wash. The phone number for media to call to reach JIC staff is 360-891-5180.

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